Frequently Asked Questions
Glenn Research Center's ISO 14001 Environmental Management System

1. What is ISO 14001?

ISO 14001 is an international standard on Environmental Management System (EMS). NASA is implementing an ISO 14001-compliant EMS in response to Presidential Executive Order 13148, Greening the Government through Excellence in Environmental Management. The NASA EMS requirement contained in NPG 8553.1 with GRC's EMS detailed in the Center's Environmental Program Manual, Chapter 1 http://osat-ext.grc.nasa.gov/emo/pub/epm/epm1.pdf.

2. What are the requirements of ISO 14001?

The basic requirements are:

Knowledge and compliance with applicable environmental regulations.
Continuous improvement of environmental performance.
Prevention of environmental accidents by ensuring that trained, competent employees handle high-risk procedures.

3. What is covered by ISO 14000?

Environmental Management System and Environmental Auditing address a wide range of issues, including:

Top management commitment to continuous improvement, compliance, and pollution prevention.
Creating and implementing environmental policies, including setting and meeting appropriate targets.
Integrating environmental considerations in operating procedures.
Training employees in regard to their environmental obligations.
Conducting audits of the environmental management system.

4. How does this environmental management system (EMS) affect my work?

The EMS is more proactive and involves all individuals at GRC. It requires more environmental awareness and a team effort to achieve clearly defined objectives and targets.

5. What are the new EMS changes and programs?

The Center's environmental policy statement has been refined, priority impacts identified, objectives and targets established, and various procedures and controls upgraded.

6. Are the EMS changes and programs supported by management?

Yes, the Environmental Pollution Control Board (EPCB), the Center's top management board for environmental policy, has approved the new environmental policy statement, objectives and targets and various other EMS elements.

7. Why is top management commitment to EMS important?

Top management's commitment to ISO 14001 must include visible concern over environmental issues and high standards for which people are held accountable. Most important is the commitment of adequate financial, organizational, and technological resources. If "saying what we do" doesn't match the "doing what we say", credibility will be lost along with individual effort and results.

8. Does the implementation of EMS really improve environmental performance?

Yes, correctly implemented it does. One basic requirement of the standard is that something must be improved every year! It also reduces the risk for accidents and improves safety.

9. What are the high priorities or significant environmental impacts at GRC and how are they being addressed?

GRC's priority impacts are hazardous waste, spills and releases, personal injury, and construction and modification of facilities and equipment. They are being addressed through programs designed to help the Center achieve specific objectives and targets.

10. What are the major environmental improvement objectives and targets at GRC and how can I help achieve them?

The objectives and targets are in the areas of hazardous waste/waste spills, pollution prevention, compliance and resource conservation. Everyone can help by getting more involved, submitting ideas and helping to implement actions that minimize GRC's
impacts. The current objectives and targets can be viewed at EMS website.
http://osat-ext.grc.nasa.gov/emo/pub/EMS/

11. When will the ISO 14001 auditors be at GRC and what will they ask me?

The auditors visit GRC periodically to monitor our progress. They may ask you about the Environmental Policy, objectives and targets, how the work you do impacts the environment, how you control your impacts, what procedures you follow, and the training you have had.

12. What is the Environmental Policy, why is it so important and where can I find a copy of it?

The policy sets the framework or direction for the entire EMS and demonstrates top management support.

"GRC operates in a manner that preserves and protects the environment through pollution prevention, the continual improvement of our operations, and complying with regulations."

This policy statement is posted in many building lobbies, on the web
http://osat-ext.grc.nasa.gov/emo/pub/EMS/ and other places.

13. How can I be sure I am doing my part to protect the environment?

Understand the environmental impacts of your job and the procedures you must follow to minimize these impacts. For example, using chemicals as part of your job may create hazardous waste and there may be a potential for spills or releases of chemicals into the environment. These impacts are controlled by implementing controls to prevent or contain spills and releases, following safe handling procedures, and ensuring the safe handling and disposal of wastes. Other ways of reducing this impact is to identify ways to eliminate the use of hazardous chemicals and the generation of waste. Additional information on how you can protect the environment is available online http://osat-ext.grc.nasa.gov/emo/pub/EMS/ from your supervisor, or by calling Mike Blotzer at 3-8159, Priscilla Mobley at 3-8333, or Dan White at 3-3103.

14. How do I find environmental resources on the Glenn Intranet?

There are two Intranet sites with environmental information: the EMS website http://osat-ext.grc.nasa.gov/emo/pub/EMS/ and the Safety and Assurance Technologies Directorate portion at http://osat.grc.nasa.gov/.

15. Who do I call in EMO for information or to relay my suggestions to improve and protect the environment?

Call Mike Blotzer at 3-8159, Priscilla Mobley at 3-8333, or Dan White at 3-3103.

16. Does everyone at GRC have an impact on the environment?

Yes, human activities impact the environment at home and at work to varying degrees. Most impacts can and should be minimized. As part of our environmental planning, GRC has identified five priority impacts and Center-wide objectives and targets for reducing them.

17. What are the benefits to improving environmental management at GRC?

Reduced impacts to the environment, improved employee safety, cost savings, reduced liabilities, improved operational efficiencies, and others.

18. Are there EMS procedures that I should follow to help protect the environment?

Yes, there are several procedures that everyone should follow. These procedures are available at the EMO and on the EMS web page. Depending upon your job there may be other specific procedures that must be followed. All procedures are available in Glenn's Environmental Programs Manual, available online at http://osat-ext.grc.nasa.gov/emo/pub/epm/epm-contents.pdf.

Please call Mike Blotzer at 3-8159, Priscilla Mobley at 3-8333, or Dan White at 3-3103 for additional information.

19. Are there supplies or equipment that I can use to help protect the environment?

Yes. Examples of such supplies and equipment include spill cleanup materials, special instruments for environmental monitoring and containers compatible with specific hazardous materials or waste. Only trained employees can handle these supplies and equipment.

20. What environmental training do I need?

General EMS awareness training is provided as part of the Center's Safety and Environmental Training. Refresher EMS awareness training can be arranged by contacting Michael Blotzer at 3-8159. If you have a job that involves priority impacts you also may need specialized training available through EMO. You should also consult with your supervisor on specialized training offered that may be required by your job.

21. What are the major components of ISO 14001?

The major elements of EMS/ISO 14001/NPG are: Environmental Policy, Planning, Implementation and Operation, Checking and Corrective Action, and Management Review.

22. What are some of the important characteristics of ISO 14001?

Some of the important characteristics of ISO 14001 are:

It is comprehensive: all members of the organization participate in environmental protection, the EMS considers all stakeholders, and there are processes to identify all environmental impacts. It is proactive: it focuses on forward thinking and action instead of reacting to command and control policies.
It is a systems approach: it stresses improving environmental protection by using a single environmental management system across all functions of the organization.

23. How does ISO 14001 relate to ISO 9001 and what are the advantages of implementing both?

ISO 9001 and ISO 14001 share many common elements, including training, record keeping, document control, checking and corrective action. Our EMS makes extensive use of our existing BMS procedures to streamline operations. For GRC, which has ISO 9001, the existing management process can be applied to 14000. The technical and regulatory aspects of an ISO 14001 EMS are combined with the existing management system, discipline, audit process, and continual improvement process of ISO 9000. Unique aspects of ISO 14001 will be visible against the 9001 background. This approach leverages the investment in ISO 9000 and reduces the cost of ISO 14001.

24. What other NASA sites are implementing ISO 14001?

NASA Stennis and Johnson are implementing an EMS similar to that at GRC. Depending upon the results of the pilot test other NASA sites may follow suit.

25. Does ISO 14001 require new documents and procedures or will we continue to use existing materials?

Most of the BMS documents that GRC already has for the existing environmental program and ISO 9001 will be used with minor revision. Very few complete new documents are being prepared.

26. How does ISO 14001 certification relate to the EMS?

ISO 14001 is a formal certification of an organization's EMS by a third party auditor.

27. Is GRC required to implement ISO 14001?

All federal agencies are required by Executive Order 13148 to implement formal environmental management systems that adhere to recognized standards. GRC, SSC, and JSC have volunteered to test implementation of a NASA-wide ISO 14001-based EMS.

28. What if I don't understand my responsibilities in complying with ISO 14001?

Check the Intranet sites, read Environmental Programs Manual Chapter 1 http://osat-ext.grc.nasa.gov/emo/pub/epm/epm1.pdf talk to your supervisor, or call EMO.

29. Isn't this a responsibility of management?

EMS is a responsibility of everyone, including management.

30. Why should GRC implement ISO 14001?

All federal agencies are required by Executive Order to implement an EMS that conforms to recognized standards. NASA has decided to test the implementation of an ISO 14001-compliant EMS to evaluate its costs and benefits. Implementation also provides a third party independent review and certification of GRC's EMS. This process identifies and facilitates continuous improvement of the environmental program.

31. Can existing environmental management activities be integrated into the EMS under 14001?

Yes, most existing programs, procedures, controls, data management, records and other elements are being integrated into the EMS.

32. Does an organization have to implement all requirements in ISO 14001?

Yes.

33. Is there a re-certification requirement if GRC gets ISO 14001 certification?

Yes, if NASA requires ISO certification of the EMS a re-certification would be required every three years.

34. How does the new Environmental Award Program fit into the EMS?

One of our core objectives is to identify and implement pollution prevention opportunities. Our most valuable resource for pollution prevention ideas is the talent and creativity of the employees at GRC. The new Environmental Award Program provides a way to reward employees who take the time and effort to help improve our environment and help GRC achieve our Center-wide objectives and targets. It encourages communication, creativity, achievement of objectives and targets, recognition, and many other EMS elements.

35. What are the future benefits of implementing EMS at GRC?

Anticipated benefits of full implementation of ISO 14001 at GRC include, but are not limited to the following:

Better management of environmental issues,
Cost savings through proactive approaches to compliance,
A safer work environment because of fewer accidents or releases of harmful substances to the environment, and
Recognition of GRC as a community leader controlling its environmental impacts.

36. What is the major difference between existing environmental program at GRC and EMS?

One difference between many existing environmental programs and an ISO 14001 EMS is that the program may not be a system integrated into all parts of the Center. The ISO 14001 system spreads environmental responsibility throughout the organization. ISO 14001 stresses the creation of a "system." This means that all parts of the program must be connected for them to survive. Connection to the organizational policy and the benefits must be visible and maintained. ISO 14001.

37. What will EMS auditors be looking for?

EMS auditors will look for continuous improvement in the system. These improvements can include better employee training, better communication of ideas from and to employees, better reporting of environmental impacts within GRC, improved identification of environmental aspects, and progress toward meeting GRC's objectives and targets.

38. How does GRC maintain its EMS following certification?

The following ongoing activities are required to maintain the EMS certification:
• Monitoring and measuring the EMS
• Investigating and handling nonconformances
• Implementing corrective action and preventive action
• Maintaining environmental records
• Establishing and maintaining an ISO 14001 audit program.